



iPhone 7 Battery Replacement

Replace the battery in an iPhone 7.

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INTRODUCTION

Use this guide to bring life back to your iPhone 7 with a new battery.

This guide instructs you to remove the display assembly; this is intended to prevent damage to the display cables. If you feel comfortable removing the battery without putting undue strain on the display cables, you can skip the display removal steps.

For optimal performance after completing the guide, calibrate your newly installed battery: Drain it below 10%, then charge it uninterrupted to 100%.

Opening the iPhone 7 will damage the waterproof seals on the display. If you do not [replace the adhesive seals](#), your phone will function normally, but will no longer be water-resistant.

[video: <https://www.youtube.com/watch?v=LVlp3HCvmYE>]



TOOLS:

- [iFixit Opening Picks set of 6](#) (1)
- [Phillips #000 Screwdriver](#) (1)
- [Tri-point Y000 Screwdriver Bit](#) (1)
- [Tweezers](#) (1)
- [P2 Pentalobe Screwdriver iPhone](#) (1)
- [iOpener](#) (1)
- [Suction Handle](#) (1)
- [Spudger](#) (1)
- [ESD Safe Tweezers Blunt Nose](#) (1)
- [Plastic Cards](#) (1)



PARTS:

- [iPhone 7 Replacement Battery](#) (1)
- [iPhone 6/6s/7 Battery Adhesive Strips](#) (1)
- [iPhone 7/7 Plus Bottom Screws](#) (1)

Step 1 — Pentalobe Screws



- ⚠ Before you begin, discharge your iPhone battery below 25%. A charged lithium-ion battery can catch fire and/or explode if accidentally punctured.
- Power off your iPhone before beginning disassembly.
- ⓘ Opening the iPhone's display will damage its waterproof seals. If you do not replace the seals, your phone will no longer be water resistant.
- Remove the two 3.4 mm pentalobe screws on the bottom edge of the iPhone.

Step 2 — Opening Procedure



- ⓘ Heating the lower edge of the iPhone will help soften the adhesive securing the display, making it easier to open.
- Use a hairdryer or [prepare an iOpener](#) and apply it to the lower edge of the iPhone for about a minute in order to soften up the adhesive underneath.

Step 3



- Attach a suction cup to the lower half of the display assembly, just above the home button.
 - ⓘ Be sure the suction cup does not overlap with the home button, as this will prevent a seal from forming between the suction cup and front glass.

Step 4



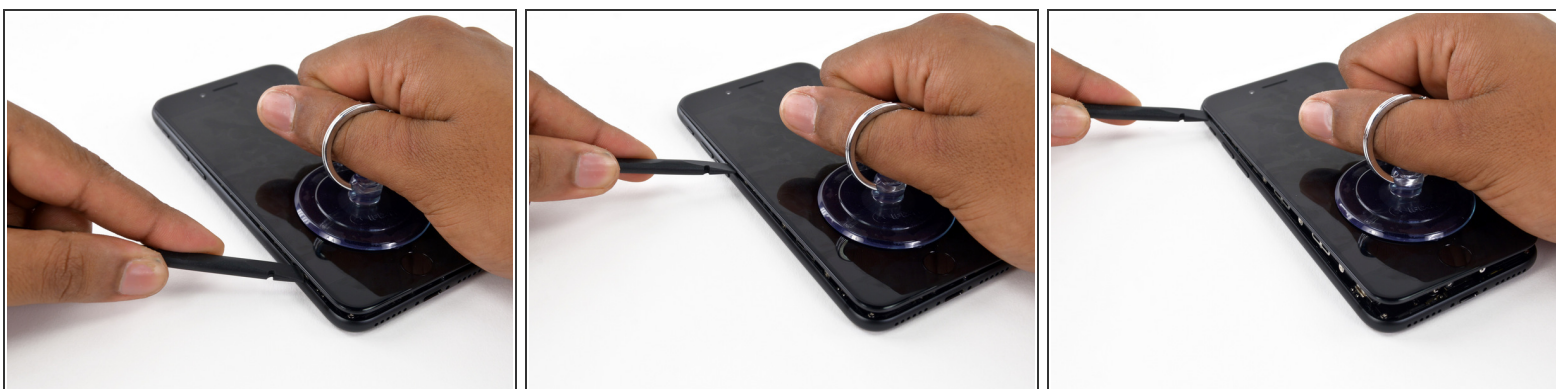
- Pull up on the suction cup to create a small gap between the display assembly and the rear case.
- Insert the flat end of a spudger into the gap.
 - ⓘ The watertight adhesive holding the display in place is very strong, and creating this initial gap takes a significant amount of force. If you're having a hard time opening a gap, rock the screen up and down to weaken the adhesive until you can fit a spudger inside.

Step 5




- Slide the spudger to the left along the lower edge of the iPhone.
- Twist the spudger to widen the gap between the display and rear case.

Step 6



- Slide the spudger up the left side of the iPhone, starting at the lower edge and moving towards the volume control buttons and silent switch.

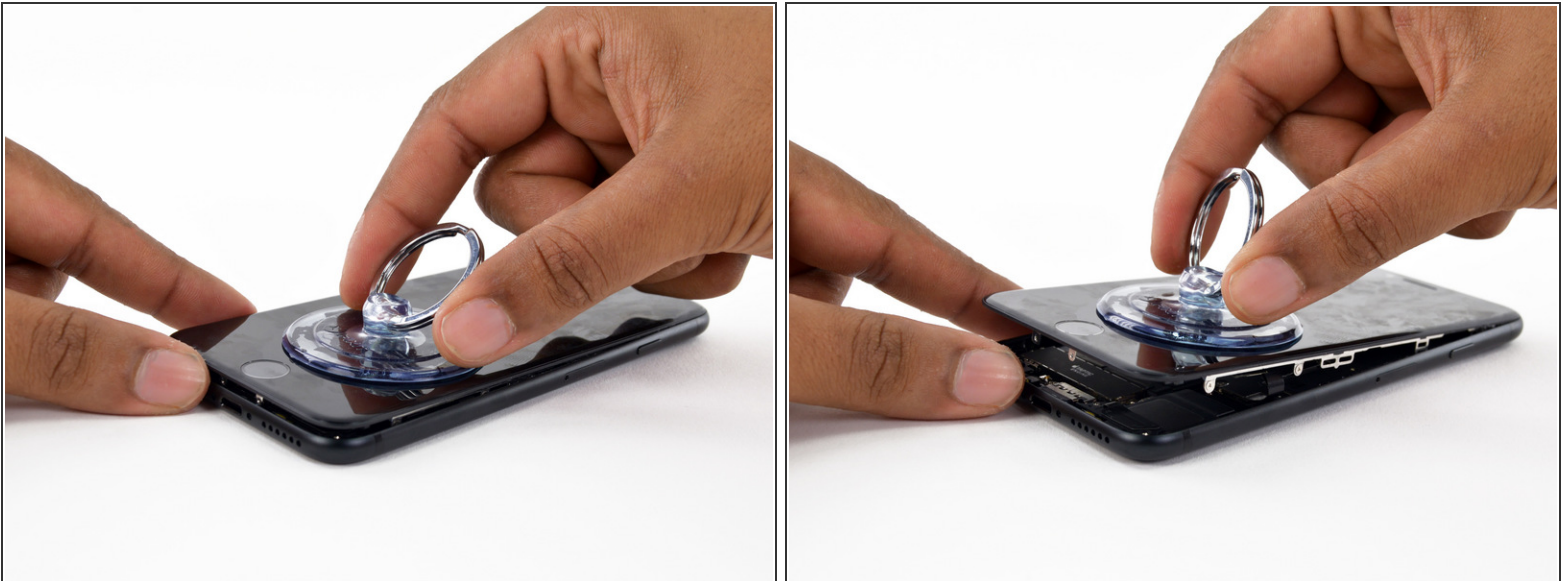
 Do not pry along the top edge of the phone, you risk damaging the plastic clips securing the display.

Step 7



- Insert the flat edge of a spudger into the bottom right corner of the device.
- Twist the spudger to widen the gap between the display assembly and the rear case.
- Slide the flat end of the spudger up the right side of the phone to break up the adhesive holding the display in place.

Step 8



- Pull up on the suction cup to lift up the display and open the iPhone.

⚠ Do not raise the display more than 10° as there are ribbon cables along the right edge of the device connecting the display to the logic board.

Step 9



- Pull up on the small nub on the suction cup to remove it from the front panel.

Step 10



- Slide an opening pick along the top edge of the iPhone, between the rear case and front panel, to break up the remaining adhesive holding the screen in place.

 Be careful not to damage the plastic clips on the top edge of the phone.

Step 11



- Pull the display assembly slightly away from the top edge of the phone to disengage the clips holding it to the rear case.
 - Open the iPhone by swinging the display up from the left side, like the back cover of a book.
- ⚠ Don't try to fully separate the display yet, as several fragile ribbon cables still connect it to the iPhone's logic board.

Step 12 — Battery Disconnection



- Remove the following tri-point Y000 screws from the lower connector bracket:
 - Three 1.2 mm screws
 - One 2.4 mm screw

Step 13



- Remove the lower connector bracket.

Step 14



- Use the point of a spudger to lift the battery connector out of its socket on the logic board.
- ⓘ Bend the connector cable up slightly to prevent it from making contact with the socket and providing power to the phone.

Step 15 — Display Assembly



- Use the flat end of a spudger or a fingernail to disconnect the two lower display connectors by prying them straight up from their sockets on the logic board.
- ☞ To reconnect these cables, press down on one end until it clicks into place, then repeat on the opposite end. **Do not** press down on the middle. If the connector is even slightly misaligned, the connector can bend, causing permanent damage.

Step 16



- Remove the two 1.3 mm Phillips screws securing the bracket over the front panel sensor assembly connector.
- Remove the bracket.

Step 17



- Disconnect the front panel sensor assembly connector from its socket on the logic board.
- ☑ This press connector should also be reconnected one end at a time to minimize the risk of bending.

Step 18



- Remove the display assembly.
- ☑ During reassembly, pause here if you wish to [replace the adhesive around the edges of the display](#).

Step 19 — Barometric Vent



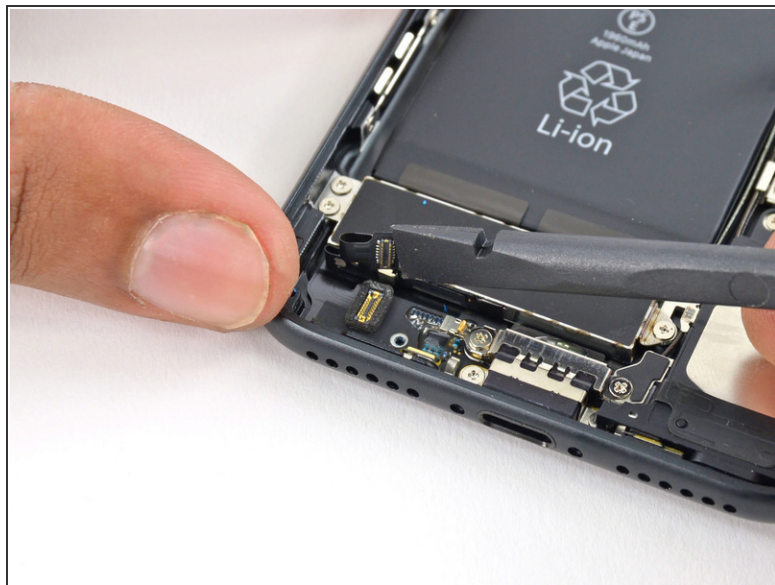
- Remove the two 1.9 mm Phillips screws securing the barometric vent to the rear case.

Step 20



- Remove the vent.

Step 21 — Taptic Engine



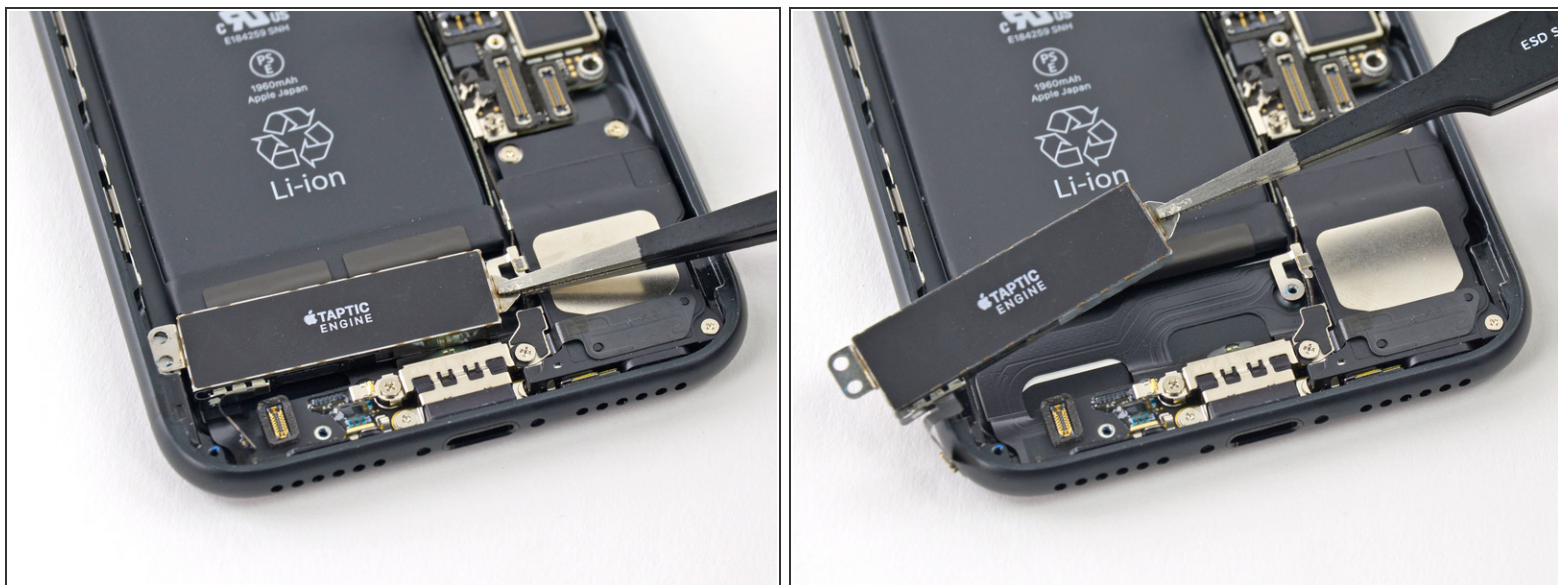
- Use the flat end of a spudger to disconnect the Taptic Engine connector from its socket on the logic board.

Step 22



- Remove the three 1.6 mm Phillips screws securing the Taptic Engine to the rear case.

Step 23



- Remove the Taptic Engine.

Step 24 — Battery



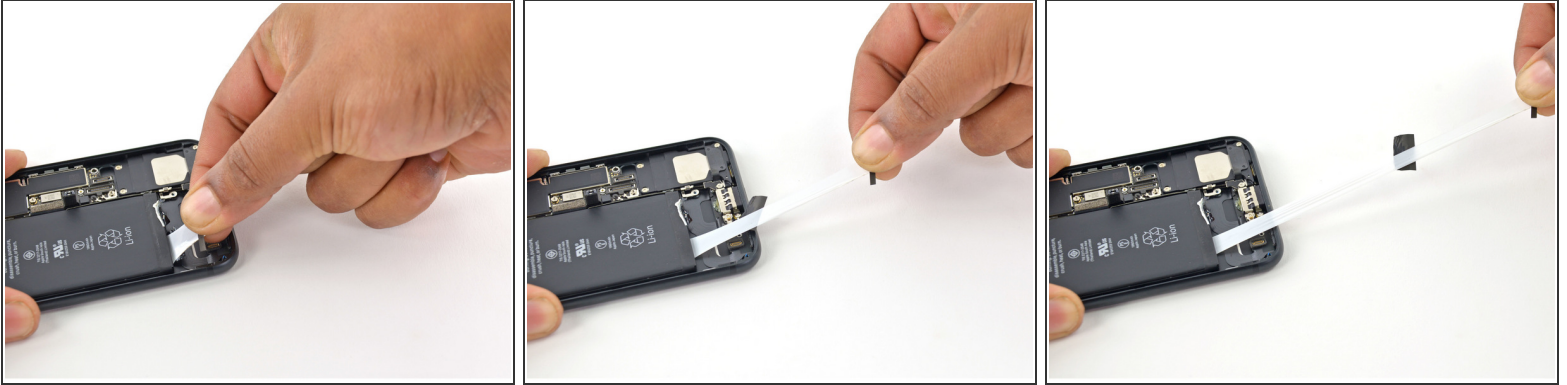
- Use a pair of tweezers with blunt tips to peel back one of the adhesive strips on the lower edge of the battery.

Step 25



- Use a pair of tweezers with blunt tips to peel back the other adhesive strip on the lower edge of the battery.

Step 26



i If this is your first time removing an iPhone battery adhesive strip, refer to the video in the following step before beginning.

! Try to keep the strips flat and unwrinkled during this procedure; wrinkled strips will stick together and break instead of pulling out cleanly.

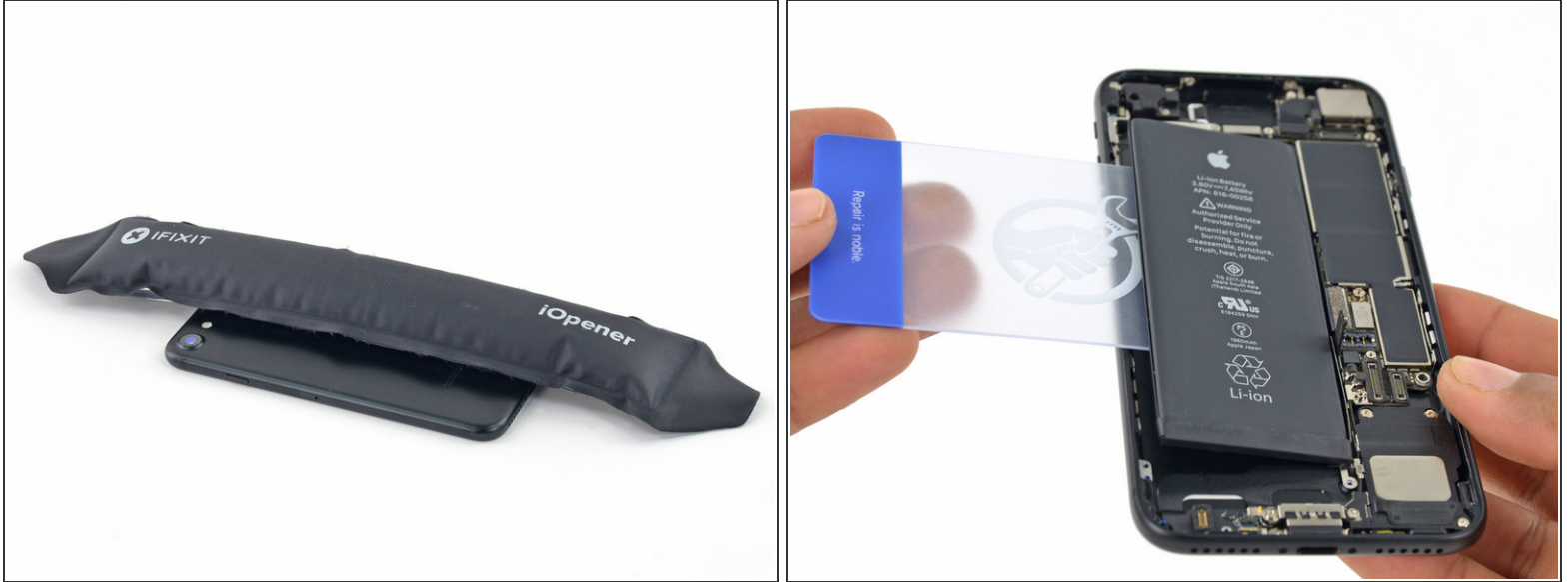
- Slowly pull one battery adhesive tab away from the battery, toward the bottom of the iPhone.
 - Pull steadily, maintaining constant tension on the strip until it slips out from between the battery and the rear case. For best results, pull the strip at a 60° angle or less.
- i** The strip will stretch to many times its original length. Continue pulling and re-grab the strip near the battery if necessary.

Step 27



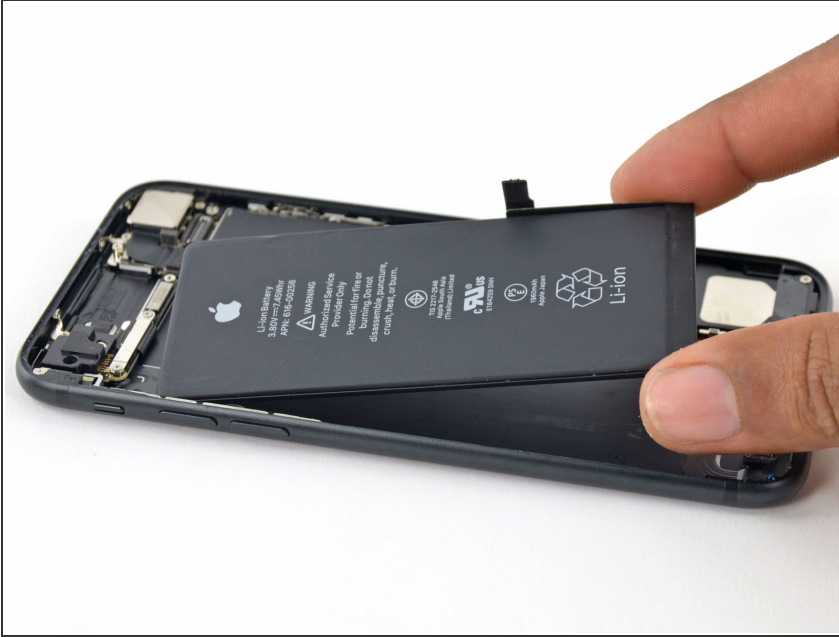
- Repeat the previous step for the second strip.
- ⚠ Hold down the battery as you remove the second strip, or the strip may fling the battery when it separates from the case.
- **If you removed both adhesive strips successfully, skip the next step.**
 - Otherwise, if either of the adhesive strips broke off underneath the battery and could not be retrieved, **continue with the next step below.**

Step 28



- i** If you successfully removed both adhesive strips, move on to the next step. Otherwise, you will need to pry the battery from the rear case.
- [Prepare an iOpener](#) and apply it to the back of the rear case, directly over the battery. Alternatively, you can apply heat using a heat gun or hair dryer.
 - After about a minute, remove the iOpener, flip the phone over and use a plastic card to break up any remaining adhesive behind the battery.
- !** Do not insert the card from the right, as prying against the logic board can damage it. Also, be sure to not bend the battery, as doing so can puncture the cell and release dangerous chemicals.
- !** Don't pry under the topmost section of the battery, near the volume up button and mute switch, or you may damage the volume controls ribbon cable, which is adhered to the rear case just beneath the battery.

Step 29



- Remove the battery from the rear case.
- ☑ When installing the battery, refer to [this guide](#) to replace your battery's adhesive strips.
- Perform a [force restart](#) after reassembly. This can prevent several issues and simplify troubleshooting.

To reassemble your device, [reapply the display adhesive](#) and follow these instructions in reverse order. For optimal performance, calibrate your newly installed battery: Drain battery below 10%, then charge uninterrupted to 100%.

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